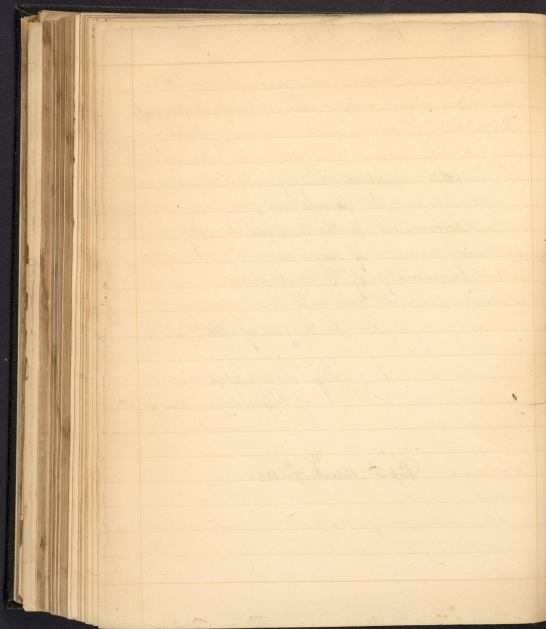


An inaugural Dissertation on
Dysentery
Submitted to the Medical Faculty
of the
University of Pennsylvania

For the Degree of M.D.

By Thomas Johnson
of Petersburg Va. - - -

Read March 17th 1823

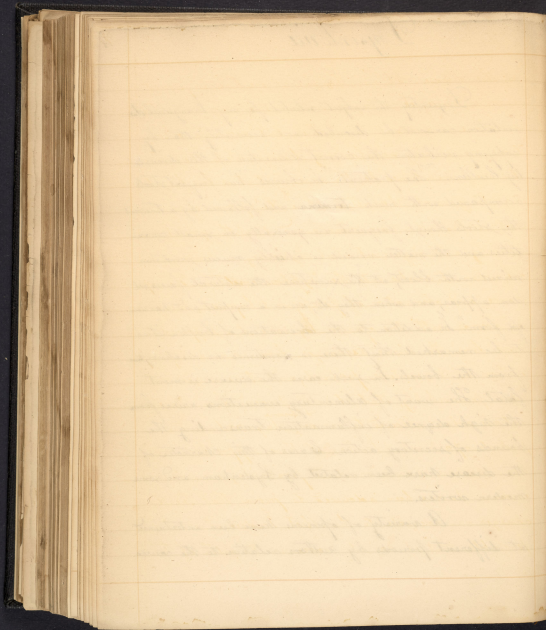


Dysentery

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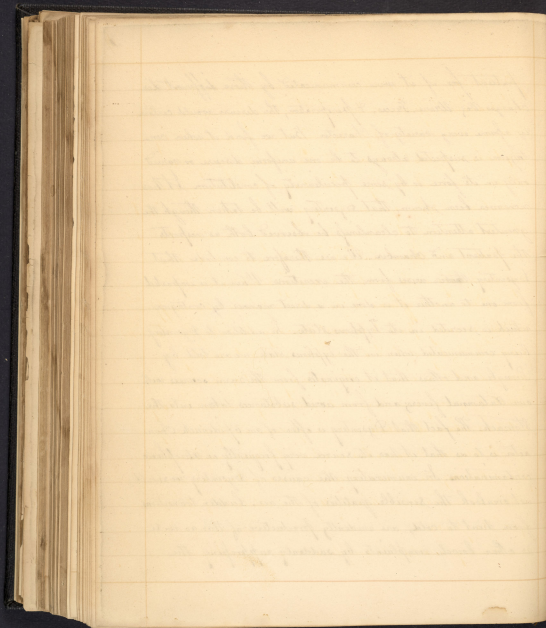
Dysentery the subject selected for my inaugural dissertation can not be described more accurately than by copying verbatim the correct delineation of this disease by Cullen. "The patient" he observes "has frequent stools accompanied with much *tenesmus* and followed by a tenesmus the stools though frequent are generally in small quantities and the matter voided is chiefly mucus, sometimes mixed with blood, at the same time the natural faeces seldom appear, and when they do, are in a compact and hardened form." In addition to the observations of Cullen it is to be remarked that there is sometimes no discharge from the bowels. In such cases the disease is most fatal. The want of alimentary evacuations arises from the high degree of inflammation transcending the bounds of secretory action. Cases of this character of the disease have been related by Sydenham and some modern writers.

A variety of opinions have been entertained at different periods by authors relative to the causes



of this disease. It was thought at one time to proceed from a specific contagion and in this way imparted from one individual to another but accurate observations have very satisfactorily demonstrated that though this may sometimes be the case, yet it is far from being its general character. It is the opinion of some recent writers who have maintained it with great ingenuity and argument that dysentery is contagious only when it runs into the Typhous condition. The experience and observation of professor Chapman, he informs us, accords with this opinion. By some it is supposed to arise from the alvine discharges, from urine and perspiration of Dysenteric patients; and it is urged with more plausibility that it will proceed from the evacuations when allowed to remain ^{in contact} stagnant in the patients apartment. Neither of these suppositions has been by any means rendered probable; no sufficient evidence having been adduced to prove that the discharges are adequate to this effect. Indeed it is not probable that it has its source in the filth of the

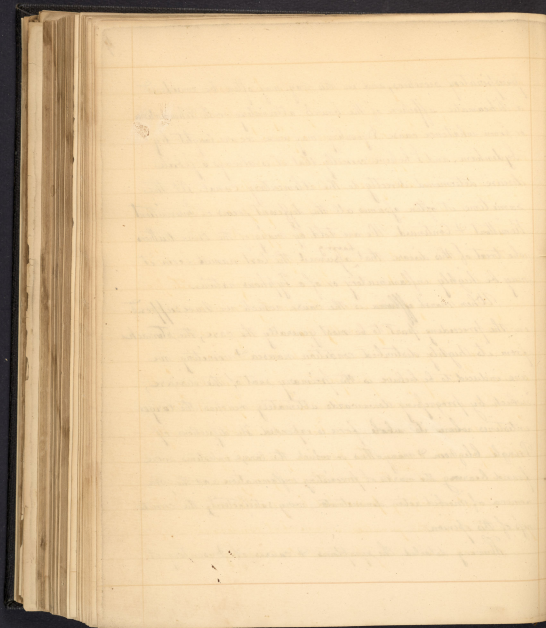
patient for if it were communicated by those different discharges viz Urine, Faeces, & perspiration, the disease would certainly assume every variety of Character. But we find it when contagion is suspected always to be one uniform disease or varied only in its force or by some peculiarity of constitution. It has moreover been shown, that Dysentery will be taken though the greatest attention to cleanliness be observed both as respects the patient and Chamber. We are therefore to conclude that Dysentery ~~never~~ arises from the excretions. When it is imparted from one to another it is done in a direct manner by contagion which is secreted in its Typhous state. In addition to Dysentery being communicated when in the Typhous state we are told by Pringle and others that it originates from the same sources with our Autumnal fevers; and from acrid substances taken into the Stomach. The fact that Dysentery is often of an Epidemick Character is to us that it has its source very frequently in atmospheric contaminations. In enumerating the causes of Dysentery we should not overlook the sensible qualities of the air. Sudden transitions from heat to cold, are evidently productive of this as well as other bowels complaints by suddenly suppressing the



perspiratory secretions, and in this way may often be considered a Rheumatic affection of the bowels alternating with Rheumatism or from whatever cause Dysentery may arise we are taught by Sydenham, and I believe correctly that it is always a febrile disease determined directly to the Alimentary Canal. At the same time it often assumes all the different forms of Intermittent Remittent & Continual. We are told by many of the older Authors who treat of this disease that ^{having} assumed the last named form it may be highly inflammatory or of a Typhous nature.

When marsh effluvia is the cause which we have supposed in the preceding part to be most generally the case, the stomach from its highly disturbed condition nausea & vomiting we are induced to believe is the primary seat of the disease, which by progressing downwards ultimately reaches the larger intestines where its whole force is expended. The dissections of Pringle Blegghem & many others in which the large intestines were found bearing the marks of preexisting inflammation and the phenomena of morbid action demonstrating very satisfactorily the correctness of this opinion.

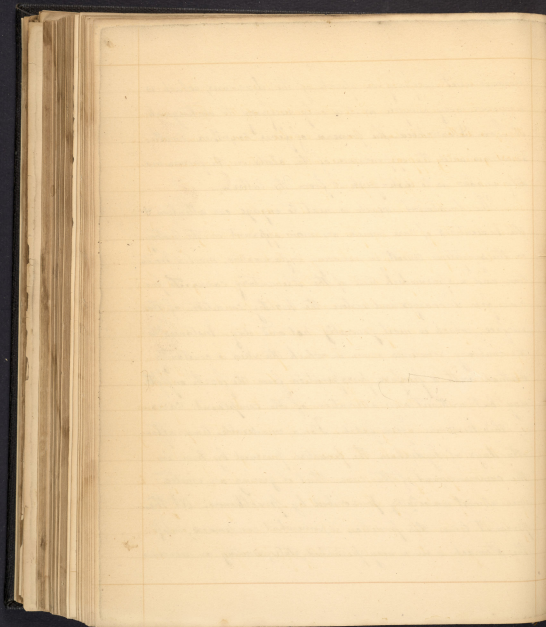
Having detailed the symptoms & causes of Dysentery it



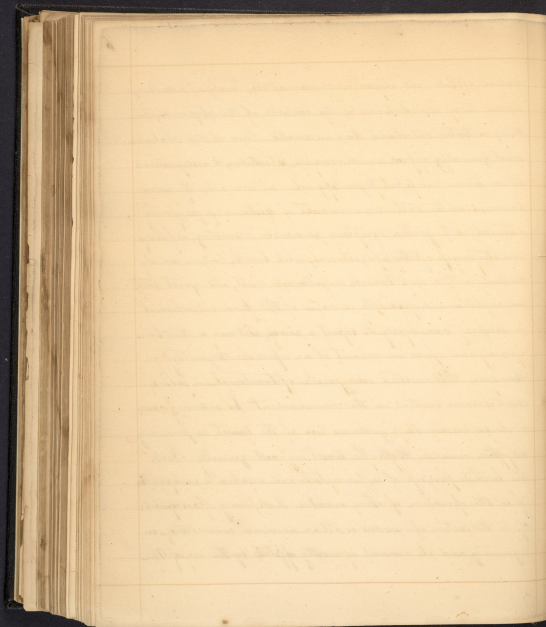
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becomes next necessary to speak of the diagnosis, which is however very simple as it is only necessary to distinguish it from Diarrhoea. The presence of fever together with Tenismus and the appearance of the stools in the former readily enables us to distinguish it from the latter—

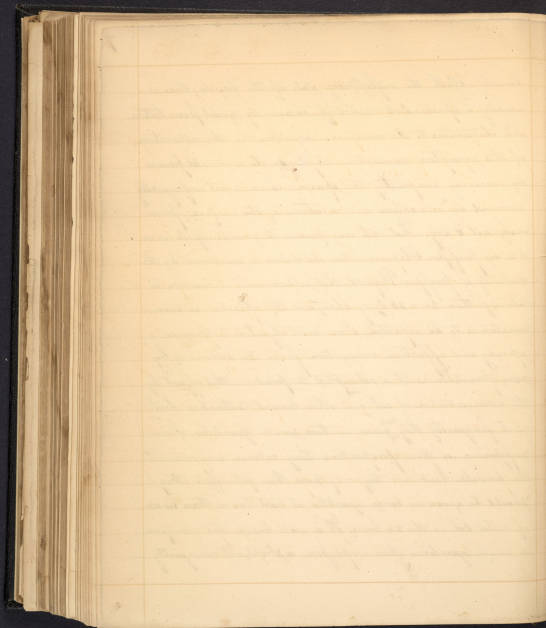
The treatment which is next to engage our attention & the indications of cure which are made apparent in the history of the symptoms consist in removing inflammation, morbid irritation and a spasmodic state of the alimentary canal. To procure free discharges and restore the healthy condition of the surface, which is most generally hot and dry—Instances to the contrary sometimes occur in which the skin is constantly bathed with a profuse perspiration from the fourth or fifth day but without any alleviation of the complaint. Cases of this kind are often fatal. For a considerable time after the days of Sydenham the practice pursued by him in the commencement of the cure that of giving an emetic was almost universally prescribed by practitioners. At the present time this practice is somewhat condemned, unless the stomach is in a very perturbed state, denoting an accumu-



lution of bile and offensive crude matters. To effect a discharge
 under these circumstances of the contents of the stomach, no-
 thing is better calculated than an emetic. Cases of this character
 most generally appear in miasmatic situations, & are sometimes
 of an Intermittent type. Dysentery when it occurs in the warm
 summer months & the commencement of autumn is frequently
 attended with gastric symptoms as nausea & vomiting, a fulness
 and tenderness of the Epigastrium, fetid breath, tongue heavily
 covered with a deep & dark or yellowish crust, and great thirst,
 an emetic is indispensable in cases of this kind and which it
 is necessary occasionally to repeat a second, and even a third time.
 Zimmerman gives an account of an epidemic Dysentery in
 Hanover that resisted every mode of treatment, in which
 emetics were omitted in the commencement. In ordinary cases
 I would recommend a judicious use of the lancet, as preceding
 all other remedies. With the lancet we most generally check
 the further progress of inflammation and awaken a susceptibil-
 ity to the operation of other remedies. A deficiency of susceptibil-
 ity to the action of remedies is not an uncommon circumstance in
 Dysentery, and its removal is mostly effected by the use of the



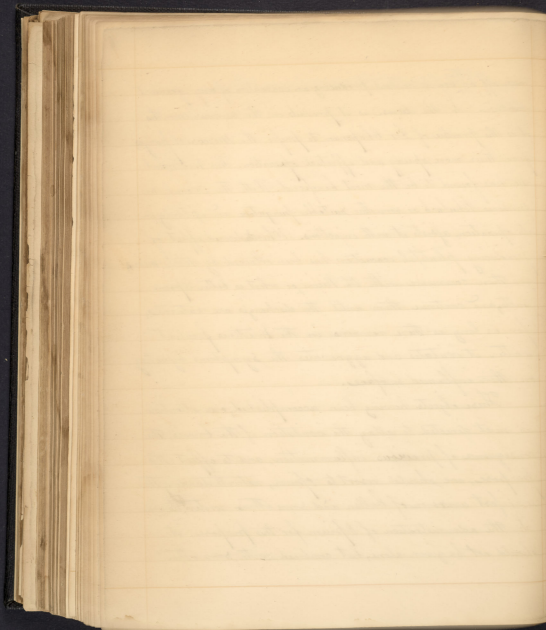
lancet. With the inflammatory state of the bowels, there is usually a spasmodick costiveness, occasioning great pain torture and obstructions to the intestinal evacuations; in the alleviation of this symptom venesection displays its unrivalled powers by removing completely the spasm which is not unfrequently followed by relaxation and moisture of the surface, previously hot & dry. That Oil may produce its greatest effects we are told by professor Chapman whose observation is sanctioned by the Authority of professor Physick that seldom will it answer to take less than 20 or 25 ℥ of blood, and the operation is even sometimes to be repeated. Our next object is to procure a speedy and effectual evacuation from the Intestines; by some practitioners it is attempted to produce this effect by the administration of oil and other lenient Cathartics but most frequently they ^{are} given in two small quantities from supposing in those proportions they calmed and cleansed the bowels. But that they may have their full effect they should be given in large quantities at least two or three ounces of castor oil in the 24 hours. It is well known that when given in small quantities their impression is slight, and consequently



run off by ^{the} bowels without producing an evacuation of any feculent matter. In the disease as it prevails in the summer months it is the practice of Dr Chapman to prefer the Mercurial purges from their more speedy and effectual operation. This treatment he has found to be the most beneficial. With the Calomel he combines Rhubarb or some other suitable purgative and if tardy in its operation, assists it with injections. When the desired effect of producing plentiful evacuations has been obtained by these means, we then commence with Pt. Picini, or what is better Epsom salts, and continue them until the discharges are natural, for as long as there remains in the Intestines feculent matter it irritates and aggravates the symptoms by acting on their inflamed surfaces.

These objects having been accomplished, our attention is next directed to allay the irritation of the bowels, the consequence of previous inflammation, and to effect this purpose, we should resort to Opium, notwithstanding the manifest aversion of Haller and some other writers, ^{to} we

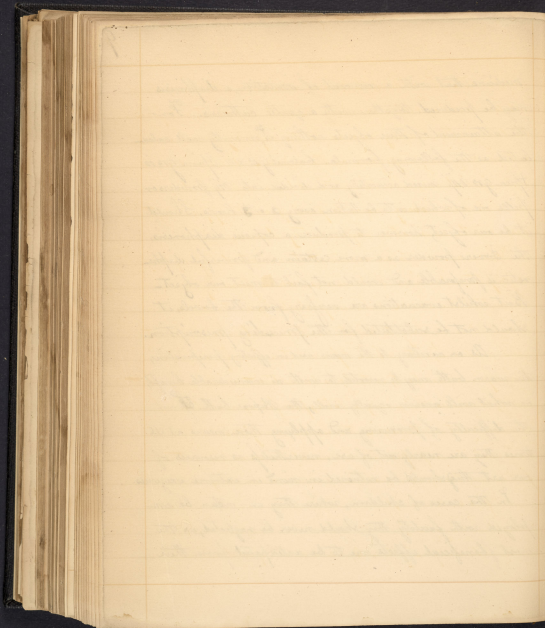
In the administration of Opium for this purpose, it should not be given alone, but combined with some other



medicine that with a removal of irritation, a diaphoresis may be produced, together with a gentle catharsis. For the attainment of these objects nothing is ^{so} eminently well calculated as the following formula. Calomel grs Xii Opium grs 10 Spica grs viij mixed accurately and divided into viij powders or pills one of which is to be taken every 2 or 3 hours. Should it be our object, however to produce a copious diaphoresis, the Dover's powder as a more certain and powerful diaphoretic is preferable and would not fail to meet our object. But whilst evacuations are necessary from the bowels, it should not be substituted for the preceding prescription.

As an auxiliary to the means used in effecting perspiration, the warm bath may be resorted to with an inconsiderable benefit, or what will answer equally well, the Vapour bath. From the difficulty of procuring and applying these means at all times they are nearly out of use, nevertheless as resources of our art they should be retained in mind in extreme exigencies.

In the cases of children, where they can often be employed with facility they should never be neglected, as the most beneficial effects are to be anticipated from their



employment. In addition to several remedies mentioned, we should not lose sight of blisters as among the most important, and particularly after having resorted to the depletion measures, without making any impression on the disease. We should under such circumstances, cover the whole abdomen with a blister, and we shall have every reason to find from its application, the best results, as in other inflammatory diseases.

There remain to be mentioned two most distressing local symptoms, *Tormina* & *Tenesmus*, which frequently occur throughout the disease, but more particularly at the close, for which it is necessary to direct our treatment. For this object some medicine, into which Opium enters largely, as the principle ingredient, is to be administered or we may afford relief, sometimes, by giving a tablespoonful of a solution of common salt in Vinegar, though in many cases, where it is our wish to keep open the bowels, at the same time the following, Oleaginous mixture answers admirably well -

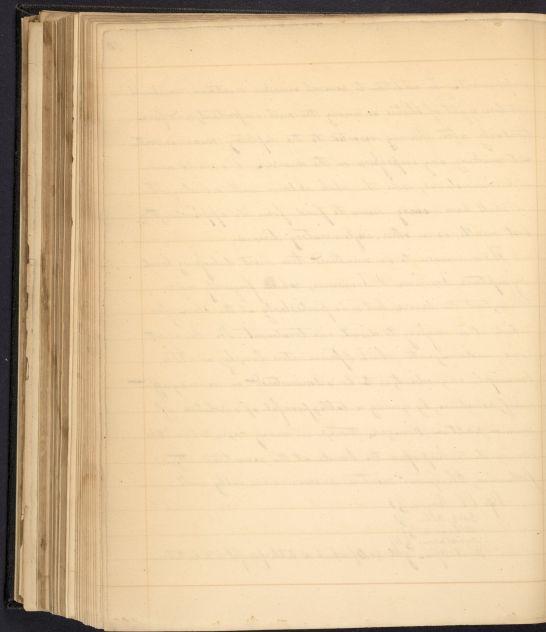
Rp: Ol. Ricini. $\frac{1}{2}$ l

Sach. Alb. $\frac{1}{2}$ l

Albamen. $\frac{1}{2}$ l

Aqua Calcis. $\frac{1}{2}$ l

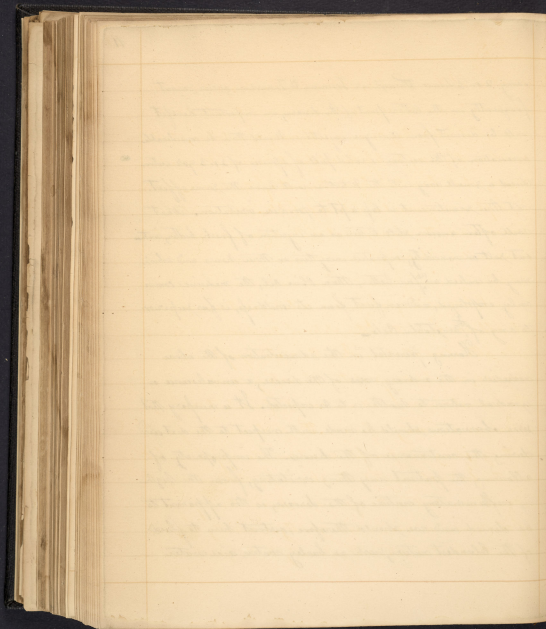
Sinct. Opii. q. to 40.0 / which a tablespoonful is to be taken



every 2 or 3 hours. Though as Formosa & Tenismus occur most frequently in the latter part of the disease, an important benefit will be derived from Anodyne injections. Should there be considerable excoriation of the rectum a solid pill of opium of 2 or 3 grs introduced a small way into the Intestine will have the same effect.

At the same time it is less apt to produce irritation. What will often answer still better is an injection of fresh butter, without salt or acidity, repeated every two or three hours and which may be valued ^{as} far better, than Olive oil, the medicine commonly employed, and in fact, from its mildness, is far superior to any of the ^{best} Vegetable Oils.

Having persisted in the administration of the above remedies in the ordinary cases of the disease, a convalescence or gradual return to health is to be expected. It is necessary that some observations should be made with respect to the diet ^{of} during the continuance of the disease. The impropriety of allowing the patient any thing irritating, from the highly inflammatory nature of the disease, is too apparent to be denied and we should therefore, restrict him to fluids of the blindest nature, such as barley water, rice water



Mucilage of Gum Arabic, Slipery Elm Tea, Sugar & water &c which are to be sweetened in every instance with refined white sugar, that while they convey a sufficiency of nutrition, at the same time they may be less calculated to exercise the digestive organs, which from their being the seat of the disease, should be kept in as quiescent a state as possible. We sometimes however have the management of the disease under another form called Chronic.

Chronic Dysentery to a certain extent is a very different affection from the other states of the disease, and deserves not a little of our attention. Here the acute symptoms are removed, some tenderness of the Alimentary canal remains, the evacuations are small and consist of feculent matters, which are extremely offensive, The stools are accompanied with gripping and painful sensations, the appetite is bad and the food not digested, the skin is parched and dry, the countenance pallid, the eyes are sunk, and the expression of countenance is meager and ghastly. Evidently in this case the blood is determined internally to the great vessels

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and abstracted from the surface of the body -

The treatment should therefore consist principally in the use of diaphoretics, such as have been mentioned in ^{the} acute forms. But should the disease resist these, which is not uncommon, we ~~must~~ resort to the Dover powder; at the same time employing such external means as are calculated to keep up a steady and unremitting diaphoresis - In addition to the above means, very considerable benefit will, ^{be} derived from the application of the flannel bandage, which consists in a broad and long piece of flannel carried round [&] circularly from the patient's hips over the abdomen to his Anus. It acts both by the mechanical support which it affords to the intestines, and by preserving that agreeable heat on the surface, so much to be desired in all bowel complaints. But there are cases of protracted dysentery which are accompanied with a morbid affection of the liver or some other Viscus; - And when there is reason to suspect such to be the case, Calomel in minute doses must be added to the remedies above mentioned. - - -

Typhous Dysentery into which the acute sometimes degenerates, from the difficulty of removing the causes under which it most generally occurs, such as crowded ships, hospitals or some peculiar circumstances, as vitiated Atmosphere, is considered a very formidable disease. The cases under the above circumstances are most generally of a Typhous Character from the commencement. The treatment required must obviously differ materially from that which has been mentioned in the other forms of the disease; and we are therefore to pursue nearly the same course that is pursued in the low states of fever. We should especially address our remedies to the Alimentary canal by commencing with emetics and subsequent moderate evacuations from the Intestines. Stimulating Cordials and blisters, which as in Typhus fever, should constitute our treatment of Typhous Dysentery. But in this disease commencing with, or acquiring the Typhous action, we should always effect a salivation at once, it having succeeded so frequently in arresting the further progress of the disease, by some of our most eminent practitioners. During the administration of

Mercury we are to sustain the strength of the patient by administering diffusible Stimulants.

We sometimes, however, find the disease assuming ^{the} intermittent form; each case having been related by Clegborn, as occurring in the discharges of Minorea; presenting a complication of Symptoms and exceedingly difficult of management. It was first spoken of by Sydenham, who says, "that whilst he is pursuing his general treatment, he administers during the Aggravation, bark and in this, he has been imitated by Clegborn and others. But we are on the authority of Professor Chapman, disposed to doubt the correctness of his practice, believing that there is scarcely any medicine in the Mat. Med. better calculated to prove injurious to the tender and inflamed surface of the Intestines than bark, and ~~we~~ should therefore disregard the circumstance of the intermission, until we have removed the affection of the bowels; and then attack it with the appropriate remedies - - - - -

